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          Jan 25
                  BLAST(R) searching in REGISTRY available in STN on the Web
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          Jan 29
                  FSTA has been reloaded and moves to weekly updates
 NEWS
          Feb 01
                  DKILIT now produced by FIZ Karlsruhe and has a new update
                  frequency
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          Feb 19
                  Access via Tymnet and SprintNet Eliminated Effective 3/31/02
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          Mar 08
                 Gene Names now available in BIOSIS
 NEWS
          Mar 22
                 TOXLIT no longer available
 NEWS
          Mar 22
                 TRCTHERMO no longer available
 NEWS
         Mar 28
                  US Provisional Priorities searched with P in CA/CAplus
                  and USPATFULL
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                 "Ask CAS" for self-help around the clock
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 NEWS 16 Apr 22 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
NEWS 17 Apr 22
                 BIOSIS Gene Names now available in TOXCENTER
NEWS 18 Apr 22
                 Federal Research in Progress (FEDRIP) now available
NEWS 19
         Jun 03
                 New e-mail delivery for search results now available
NEWS 20
         Jun 10
                 MEDLINE Reload
NEWS 21
         Jun 10
                 PCTFULL has been reloaded
NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d.
              CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
               AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
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=> s fie or fertilization independent endosperm 164 FIE OR FERTILIZATION INDEPENDENT ENDOSPERM

=> s l1 and plant?

1.2 44 L1 AND PLANT?

=> dup rem 12

PROCESSING COMPLETED FOR L2

28 DUP REM L2 (16 DUPLICATES REMOVED)

=> d 1-10 ti

L3 ANSWER 1 OF 28 CAPLUS COPYRIGHT 2002 ACS

Polycomb genes from maize : ZMFIE2, its protein motif analysis and characterization

1.3 ANSWER 2 OF 28 CAPLUS COPYRIGHT 2002 ACS

TT Plant fertilization-independent

endosperm proteins and their cDNA and genomic sequences

ANSWER 3 OF 28 CAPLUS COPYRIGHT 2002 ACS L3

TI A method for controlling endosperm size and development in transgenic plants with attenuating genomic imprinting

1.3 ANSWER 4 OF 28 CAPLUS COPYRIGHT 2002 ACS

TΙ Genes FIE1 and FIE3 from Arabidopsis that control endosperm development in plants

L3 ANSWER 5 OF 28 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1

ΤI Polycomb repression of flowering during early plant development

ANSWER 6 OF 28 CAPLUS COPYRIGHT 2002 ACS L3

тI Polycomb group genes control pattern formation in plant seed

L3 ANSWER 7 OF 28 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

Autonomous endosperm development in flowering plants: How to ΤI overcome the imprinting problem.

L3 ANSWER 8 OF 28 CAPLUS COPYRIGHT 2002 ACS

DUPLICATE 3 ΤI Genomic imprinting and seed development: Endosperm formation with and

without sex

ANSWER 9 OF 28 CAPLUS COPYRIGHT 2002 ACS L3

Transcriptional activator nucleic acids and polypeptides from TT plants

ANSWER 10 OF 28 AGRICOLA 1.3 DUPLICATE 4

Expression and parent-of-origin effects for FIS2, MEA, and FIE тT in the endosperm and embryo of developing Arabidopsis seeds.

=> d 10 so

L3 ANSWER 10 OF 28 AGRICOLA

DUPLICATE 4

Proceedings of the National Academy of Sciences of the United States of America, Sept 12, 2000. Vol. 97, No. 19. p. 10637-10642
Publisher: Washington, D.C.: National Academy of Sciences, CODEN: PNASA6; ISSN: 0027-8424

=> d 10 au

L3 ANSWER 10 OF 28 AGRICOLA DUPLICATE 4

AU Luo, M.; Bilodeau, P.; Dennis, E.S.; Peacock, W.J.; Chaudhury, A.

=> d 10 ab

1.3 ANSWER 10 OF 28 AGRICOLA DUPLICATE 4 AΒ The promoters of MEA (FIS1), FIS2, and FIE (FIS3), genes that repress seed development in the absence of pollination, were fused to beta-glucuronidase (GUS) to study their activity pattern. The FIS2::GUS products is found in the embryo sac, in each of the polar cell nuclei, and in the central cell nucleus. After pollination, the maternally derived FIS2::GUS protein occurs in the nuclei of the cenocytic endosperm. Before cellularization of the endosperm, activity is terminated in the micropylar and central nuclei of the endosperm and subsequently in the nuclei of the . chalazal cyst. MEA::GUS has a pattern of activity similar to that of FIS2::GUS, but FIE::GUS protein is found in many tissues, including the prepollination embryo sac, and in embryo and endosperm postpollination. The similarity in mutant phenotypes; the activity of FIE, MEA, and FIS2 in the same cells in the embryo sac; and the fact that MEA and FIE proteins interact in a yeast two-hybrid system suggest that these proteins operate in the same system of control of seed development. Maternal and not paternal FIS2::GUS, MEA::GUS, and FIE::GUS show activity in early endosperm, so these genes may be imprinted. When fis2, mea, and fie mutants are pollinated, seed development is arrested at the heart embryo stage. The seed arrest of mea and fis2 is avoided when they are fertilized by a low methylation parent. The wild-type alleles of MEA or FIS2 are not required. The parent-of-orgin-determined differential activity of MEA, FIS2, and

=> d ab

L3 ANSWER 1 OF 28 CAPLUS COPYRIGHT 2002 ACS

AB The present invention relates to polycomb genes and polypeptides isolated from Zea mays named ZMPIE2. The sequence homol anal. of ZMPIE2 to other polycomb proteins is also provided, which indicates that ZMPIE2 is a PIE-like gene. It contains nuclear localization signal and ND-40 repeat motif. ZMPIEZ is mapped to chromosome 10. The mRNA tissue expression patterns is also studied. This corn polycomb gene might be useful for transcription repression or inhibition of transcription repression since they might function as transcriptional repressors like other esc-like proteins.

FIE is not dependent on DNA methylation, but methylation does control some gene(s) that have key roles in seed development.

=> d so

L3 ANSWER 1 OF 28 CAPLUS COPYRIGHT 2002 ACS

SO PCT Int. Appl., 53 pp.

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=> d pi
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L3 ANSWER 1 OF 28 CAPLUS COPYRIGHT 2002 ACS PATENT NO. KIND DATE APPLICATION NO. DATE -----PΙ WO 2002006321 A2 20020124 WO 2001-US22254 20010716 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

#### => d 2 ab

- ANSWER 2 OF 28 CAPLUS COPYRIGHT 2002 ACS
- AB This invention relates to an isolated nucleic acid fragments encoding reproden. proteins homologous to Arabidopsis thaliana fertilization -independent endosperm protein. The invention also relates to the construction of a chimeric gene encoding all or a portion of the reproden. protein, in sense or antisense orientation, wherein expression of the chimeric gene results in proden of altered levels of the reproden. protein in a transformed host cell. Discovery of such fertilization-independent endosperm genes should offer new ways of producing appomictic plants.

# => d 2 pi

- L3 ANSWER 2 OF 28 CAPLUS COPYRIGHT 2002 ACS
  PATENT NO. KIND DATE APPLICATION NO. DATE
- PI WO 2001016325 A2 20010308 W0 2000-US23735 20000830
  W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
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  - EP 1208204 A2 20020529 EP 2000-957908 20000830
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## => d 3 so

L3 ANSWER 3 OF 28 CAPLUS COPYRIGHT 2002 ACS SO PCT Int. Appl., 65 pp. CODEN: PIXXD2

### => d 3 pi

L3 ANSWER 3 OF 28 CAPLUS COPYRIGHT 2002 ACS

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PATENT NO.
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      WO 2001009299
                           A2 20010208
                                                     WO 2000-GB2953
                                                                            20000731
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           204759 A2 20020515 EP 2000-949752 20000731
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## => d 3 ab

L3 ANSWER 3 OF 28 CAPLUS COPYRIGHT 2002 ACS

AB A method for controlling endosperm size and development, and seed viability in plants is provided. The method employs nucleic acid constructs encoding proteins involved in genomic imprinting, in the prodn. of transgenic plants. The nucleic acid constructs can be used in the prodn. of transgenic plants to affect interspecific hybridization.

# => d 4 pi

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ANSWER 4 OF 28 CAPLUS COPYRIGHT 2002 ACS
     PATENT NO. KIND DATE APPLICATION NO. DATE
                                             US 1998-177249
ΡI
     US 6229064
                        B1
                              20010508
                                                                 19981022
     CA 2330765
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                        A1
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W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
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                       A1 19991123
A1 20010207
                                            AU 1999-37833
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                              20020514
                        Т2
                                               JP 2000-547203
                                                                 19990503
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### => d 5 ab

L3 ANSWER 5 OF 28 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1
AB All plants flower late in their life cycle. For example, in
Arabidopsis, the shoot undergoes a transition and produces reproductive
flowers after the adult phase of vegetative growth. Much is known about
genetic and environmental processes that control flowering time in mature
plants. However, little is understood about the mechanisms that
prevent plants from flowering much earlier during embryo and
seedling development. Arabidopsis embryonic flower (emf1 and emf2)
mutants flower soon after germination, suggesting that a floral repression
mechanism is established in wild-type plants that prevents

flowering until maturity. Here, we show that polycomb group proteins play a central role in repressing flowering early in the plant life cycle. We found that mutations in the Fertilization
Independent Endosperm (FIB. polycomb gene
caused the seedling shoot to produce flower-like structures and organs.
Flower-like structures were also generated from the hypocotyl and root, organs not assocd, with reproduc. Expression of floral induction and homeotic genes was derepressed in mutant embryos and seedlings. These results suggest that FIB-mediated polycomb complexes are an essential component of a floral repression mechanism established early during plant development.

### => d 5 so

- L3 ANSWER 5 OF 28 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1 SO Proceedings of the National Academy of Sciences of the United States of America (2001), 98(24), 14156-14161 CODEN: PNASA6; ISSN: 0027-8424
- => d 5 au
- L3 ANSWER 5 OF 28 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 1
  AU Kinoshita, Tetsu; Harada, John J.; Goldberg, Robert B.; Fischer, Robert L.
- => d 6 ab
- ANSWER 6 OF 28 CAPLUS COPYRIGHT 2002 ACS DUPLICATE 2 A review and discussion with 28 refs. Transcriptional activators of the AB Trithorax group (TRX-G) and repressors of the Polycomb group (Pc-G) are involved in multiple aspects of embryogenesis in Drosophila and the mouse and appear to have a conserved role in the zygotic control of the development of the anterior-posterior axis. In the model plant Arabidopsis, three Pc-G genes have been isolated and characterized to date. CURLY LEAF (CLF) represses the expression of a floral homeotic gene in vegetative tissues but does not appear to have a role in plant embryogenesis. Two other Pc-G genes, FIS1/MEDEA and FIS3/FIE, have been characterized in studies of mutants that produce seeds in the absence of fertilization. Seeds resulting from autonomous development in fis mutants do not contain an embryo but only endosperm, the second product of double fertilization in flowering plants. Thus, FIS qenes are considered to be repressors of endosperm development before fertilization. When fis ovules are fertilized, the endosperm patterning along the major polar axis is perturbed. Posterior structures develop in more anterior domains of the endosperm. This correlates with the ectopic expression of a posterior mol. marker. FIS genes appear to be potent regulators of the establishment of the anterior-posterior polar axis in the endosperm.

### => d 6 so

L3 ANSWER 6 OF 28 CAPLUS COPYRIGHT 2002 ACS SO Current Biology (2001), 11(4), 277-281 CODEN: CUBLE2; ISSN: 0960-9822

DUPLICATE 2